# MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

## Elkhart Products Corporation 1255 Oak Street Elkhart, Indiana 46514

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 039-11709-00036	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:

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Permit Reviewer: CAO/MES

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#### **SECTION A**

#### SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary hard chromium electroplating source.

Authorized Individual: Gary Emerson

Source Address: 1255 Oak Street, Elkhart, Indiana 46514

Mailing Address: P.O. Box 1008 Phone Number: (219) 264-3181

SIC Code: 3498 County Location: Elkhart

County Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit

Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

#### A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) Two (2) hard chrome electroplating tanks, identified as Tanks 4270 and 4269, constructed in 1998, using a hexavalent chromium bath and having rectifier capacities of 500 amps, each, and a maximum cumulative rectifier capacities of 2,940,000 amp-hours, each, equipped with a composite mesh pad scrubber as control, and exhausting to stack S1.
- (b) One (1) strip tank, using a caustic soda solution, exhausting to stack S2.
- (c) On site soil remediation for trichloroethylene.
- (d) Ten (10) natural gas fired heaters, capacity: 2.40 million British thermal units per hour, total.
- (e) Seven (7) natural gas fired heating/cooling units, capacity: 1.31 million British thermal units per hour, total.
- (f) Four (4) natural gas fired air makeup units, capacity: 14.7 million British thermal units per hour, total.
- (g) One (1) natural gas fired annealing oven, capacity: 1.2 million British thermal units per hour.
- (h) One (1) diesel dispensing facility, having a storage capacity of 300 gallons, and dispensing 384 gallons per year.
- (i) One (1) kerosene dispensing facility, having a storage capacity of 300 gallons, and dispensing 363 gallons per year.

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- (j) Machining of production tooling, where an aqueous cutting coolant continuously floods the machining interface, coolant usage: 1.32 gallons per day.
- (k) Nine (9) small cold cleaner parts washers, using non-halogenated solvents, usage: 180 gallons of solvent per year, total.
- (I) One (1) silicone-bronze welding station, maximum weld usage: 0.75 pound per hour.
- (m) Two (2) small natural gas fired holding pots for holding molten metal, capacity: 500 pounds of metal (bismuth, tin and lead) per hour, each, and less than 0.4 million British thermal units per hour, total.
- (n) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.
- (o) Packaging and labeling using water based adhesives that are less than or equal to five percent (5%) by volume of VOCs excluding HAPs, maximum usage rate: 0.53 gallon per hour.
- (p) Thirteen (13) grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations, capacity: 8 pounds of steel per hour.
- (q) One (1) natural gas fired steam generating boiler, identified as 2071, constructed in September 1986, capacity: 5.021 million British thermal units per hour.
- (r) One (1) natural gas fired steam generating boiler, identified as 3641, constructed in January 1995, capacity: 8.369 million British thermal units per hour.

#### **SECTION B**

#### **GENERAL CONDITIONS**

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

## B.1 Permit No Defense [IC 13]

This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

## B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

#### B.4 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of operating permits pursuant to 326 IAC 2 (Permit Review Rules).

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#### **SECTION C**

#### **SOURCE OPERATION CONDITIONS**

#### **Entire Source**

## C.1 PSD and Part 70 Minor Source Status [326 IAC 2-2] [40 CFR 52.21][326 IAC 2-7]

- (a) The total source potential to emit of each criteria pollutant is less than two hundred fifty (250) tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit  $PM_{10}$ ,  $SO_2$ , VOC,  $NO_X$  or CO to one hundred (100) tons per year from this source, shall cause this source to be considered a major source under 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.
- (c) Any change or modification which may increase potential to emit to two hundred fifty (250) tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAQ prior to making the change.

## C.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-7]

Any change or modification which may increase potential to emit to ten (10) tons per year of any single hazardous air pollutant, twenty-five (25) tons per year of any combination of hazardous air pollutants from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

#### C.3 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

## C.4 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

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(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

## C.5 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

## C.6 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by a notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

## C.7 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to operate may be revoked for any of the following causes:

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- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

## C.8 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

## C.9 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

## **Testing Requirements**

#### C.10 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]

Compliance testing on new emissions units shall be conducted within sixty (60) days after achieving maximum production rate, but no later than one hundred eighty (180) days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

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(b) All test reports must be received by IDEM, OAQ, within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

## **Compliance Monitoring Requirements**

#### C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

## C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

## C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the

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response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied; or
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

#### C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

#### **Record Keeping and Reporting Requirements**

## C.15 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or

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applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a) (1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

## C.16 Annual Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
  - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

## C.17 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating

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at normal representative conditions.

- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

## C.18 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements:
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;

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- (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C Compliance Monitoring Plan Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

## C.19 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) A malfunction as described in 326 IAC 1-6-2; or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

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(e) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(f) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

#### C.20 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality Indiana Department of Environmental Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

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#### SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

## **Emissions Unit Description:**

(a) Two (2) hard chrome electroplating tanks, identified as Tanks 4270 and 4269, constructed in 1998, using a hexavalent chromium bath and having rectifier capacities of 500 amps, each, and a maximum cumulative rectifier capacities of 2,940,000 amp-hours, each, equipped with a composite mesh pad scrubber as control, and exhausting to stack S1.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

## Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

## D.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart N. The Permittee shall comply with the requirements of this condition on and after the compliance date for the tanks.

D.1.2 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1] [40 CFR Part 63, Subpart N] The provisions of 40 CFR 63, Subpart N - National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, which are incorporated by reference as 326 IAC 20-8-1, apply to tanks 4270 and 4269. A copy of this rule is attached. The Permittee shall comply with the requirements of this condition on and after the compliance date for the tanks.

## D.1.3 Chromium Emissions Limitation [40 CFR 63.342(c)] [40 CFR 63.343(a)(1)&(2)] [326 IAC 20-8-1]

- (a) The emission limitations in this condition apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for tanks subject to 326 IAC 20-8-1. The emission limitations do not apply during periods of malfunction.
- (b) The hard chromium electroplating tanks, identified as 4270 and 4269, are considered small, new hard chromium electroplating operations. During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from the tanks by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm [6.6x10<sup>-6</sup> gr/dscf].

#### D.1.4 Work Practice Standards [40 CFR 63.342(f)] [326 IAC 20-8-1]

The following work practice standards apply to tanks 4270 and 4269:

- (a) At all times, including periods of startup, shutdown, malfunction and excess emissions, the Permittee shall operate and maintain tanks 4270 and 4269, including the composite mesh pad scrubber and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP) required by Condition D.1.6.
- (b) Malfunctions and excess emissions shall be corrected as soon as practicable after their occurrence in accordance with the OMP required by Condition D.1.6.
- (c) These operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.

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(d) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to IDEM, OAQ, which may include, but is not limited to, monitoring results; review of the OMP, procedures, and records; and inspection of the source.

- (e) Based on the results of a determination made under paragraph (d) of this condition, IDEM, OAQ may require that the Permittee make changes to the OMP required by Condition D.1.6. Revisions may be required if IDEM, OAQ finds that the plan:
  - (1) Does not address a malfunction or period of excess emissions that has occurred;
  - (2) Fails to provide for the operation of tanks 4270 and 4269, the composite mesh pad scrubber and process monitoring equipment during a malfunction or period of excess emissions in a manner consistent with good air pollution control practices; or
  - (3) Does not provide adequate procedures for correcting malfunctioning process equipment, monitoring equipment or other causes of excess emissions as quickly as practicable.

The work practice standards that address operation and maintenance must be followed during malfunctions and periods of excess emissions.

## D.1.5 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan (PMP), in accordance with Section B-Preventive Maintenance Plan, of this permit, is required for the tanks 4270 and 4269 and the composite mesh pad scrubber.

## D.1.6 Operation and Maintenance Plan [40 CFR 63.342(f)(3)] [326 IAC 20-8-1]

- (a) The Permittee shall prepare an Operation and Maintenance Plan (OMP) to be implemented no later than the startup date of tanks 4270 and 4269. The OMP shall specify the operation and maintenance criteria for the tanks, the composite mesh pad scrubber, and monitoring equipment, and shall include the following elements:
  - (1) For the composite mesh-pad system (CMP):
    - (A) Quarterly visual inspections of the device to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device.
    - (B) Quarterly visual inspection of the back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist.
    - (C) Quarterly visual inspection of the duct work from the tank to the control device to ensure there are no leaks.
    - (D) Perform washdown of the composite mesh-pads in accordance with manufacturers recommendations.
  - (2) A standardized checklist to document the operation and maintenance criteria for tanks 4270 and 4269, the air pollution control device, the add-on air pollution control device and the monitoring equipment.

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(3) Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions or periods of excess emissions as indicated by monitoring data do not occur.

- (4) A systematic procedure for identifying malfunctions and periods of excess emissions of tanks 4270 and 4269, the composite mesh pad scrubber, and monitoring equipment; and for implementing corrective actions to address such malfunctions and periods of excess emissions.
- (b) The Permittee may use applicable standard operating procedures (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans such as the PMP required in Condition D.1.5, as the OMP, provided the alternative plans meet the above listed criteria in Condition D.1.6(a).
- (c) If the OMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction or period of excess emissions at the time the plan is initially developed, the Permittee shall revise the OMP within forty-five (45) days after such an event occurs. The revised plan shall include procedures for operating and maintaining tanks 4270 and 4269, the composite mesh pad scrubber, and the monitoring equipment, during similar malfunction or period of excess emissions events, and a program for corrective action for such events.
- (d) If actions taken by the Permittee during periods of malfunction or period of excess emissions are inconsistent with the procedures specified in the OMP, the Permittee shall record the actions taken for that event and shall report by phone such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the Permittee makes alternative reporting arrangements, in advance, with IDEM, OAQ.
- (e) The Permittee shall keep the written OMP on record after it is developed to be made available, upon request, by IDEM, OAQ for the life of tanks 4270 and 4269 or until the tank is no longer subject to the provisions of 40 CFR 63.340. In addition, if the OMP is revised, the Permittee shall keep previous versions of the OMPs on record to be made available for inspection, upon request by IDEM, OAQ for a period of five (5) years after each revision to the plan.

## Compliance Determination Requirements [326 IAC 2-1.1-11]

- D.1.7 Performance Testing [326 IAC 2-1.1-11] [40 CFR 63.343(b)(2)] [40 CFR 63.7] [40 CFR 63.344] [326 IAC 20-8-1]
  - (a) A performance test demonstrating initial compliance for tanks 4270 and 4269 was performed on August 19, 1998.
    - During the initial performance test, it was determined that the average pressure drop across the composite mesh pad system was 3.0 inches of water and the average outlet chromium concentration was 0.0056 mg/dscm.
  - (b) The Permittee is not required to further test tanks 4270 and 4269 by this permit. However, the IDEM may require testing when necessary to determine if the tanks are in compliance. If testing is required by the IDEM, compliance with the limits specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with 40 CFR 63.344 and Section C Performance Testing.

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(c) Any change, modification, or reconstruction of the tanks (4270 and 4269), the composite mesh pad scrubber, or monitoring equipment may require additional performance testing conducted in accordance with 40 CFR 63.344 and Section C - Performance Testing.

## Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

- D.1.8 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-6.1-5(a)(2)] [40 CFR 63.343(c)] [326 IAC 20-8-1]
  - (a) Pursuant to 40 CFR 63.343(c)(1)(ii), when using a composite mesh-pad system to comply with the limits specified in Condition D.1.3, the Permittee shall monitor and record the pressure drop across the composite mesh-pad system during tank operation once each day that the hard chromium electroplating tank is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ±1 inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant values for pressure drop established during multiple performance tests.
  - (b) Tank operation or operating time is defined as that time when a part is in the tank and the rectifier is turned on. If the amount of time that no part is in the tank is fifteen minutes or longer, that time is not considered operating time. Likewise, if the amount of time between placing parts in the tank (i.e., when no part is in the tank) is less than fifteen minutes, that time between plating the two parts may be considered operating time.

## Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

## D.1.9 Record Keeping Requirements [40 CFR 63.346] [326 IAC 20-8-1]

The Permittee shall maintain records to document compliance with Conditions D.1.3, D.1.4 and D.1.6 using the forms provided with this permit. These records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit and include a minimum of the following:

- (a) Inspection records for the composite mesh pad system and monitoring equipment to document that the inspection and maintenance required by Conditions D.1.6 and D.1.8 have taken place. The record can take the form of a checklist and should identify the following:
  - (1) The device inspected;
  - (2) The date of inspection;
  - (3) A brief description of the working condition of the device during the inspection, including any deficiencies found; and
  - (4) Any actions taken to correct deficiencies found during the inspection, including the date(s) such actions were taken.
- (b) Records of all maintenance performed on tanks 4270 and 4269, the composite mesh pad scrubber, and monitoring equipment.
- (c) Records of the occurrence, duration, and cause (if known) of each malfunction of tanks 4270 and 4269, the composite mesh pad scrubber, and monitoring equipment.
- (d) Records of the occurrence, duration, and cause (if known) of each period of excess emissions of tanks 4270 and 4269, the composite mesh pad scrubber, and monitoring equipment as indicated by monitoring data collected in accordance with this condition.

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- (e) Records of actions taken during periods of malfunction or excess emissions when such actions are inconsistent with the OMP.
- (f) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP.
- (g) Test reports documenting results of all performance tests.
- (h) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance.
- (i) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.
- (j) The total process operating time, as defined in Condition D.1.8(b), of each tank, during the reporting period.
- (k) Records of the actual cumulative rectifier capacity of each hard chromium electroplating tank expended during each month of the reporting period, and the total capacity expended to date for a reporting period.
- (I) All documentation supporting the notifications and reports required by 40 CFR 63.9 and 63.10 (Subpart A, General Provisions) and by Condition D.1.11.
- D.1.10 Reporting Requirements [326 IAC 3-6-4(b)] [40 CFR 63.344(a), 63.345 and 63.347] [326 IAC 20-8-11

The notifications and reports required in this section shall be submitted to IDEM, OAQ using the address specified in Section C - General Reporting Requirements.

- (a) Notifications:
  - (1) Initial Notifications
    The Permittee shall notify IDEM, OAQ in writing that the source is subject to 40
    CFR Part 63, Subpart N. The notification shall be submitted no later than one hundred eighty (180) days after the compliance date and shall contain the information listed in 40 CFR 63.347(c)(1).
  - (2) A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR Part 63, Subpart N.
    - (A) The NCS shall be submitted to IDEM, OAQ, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(2).
    - (B) The NCS for tanks 4270 and 4269 shall be submitted to IDEM, OAQ immediately.
  - (3) Notification of Construction or Reconstruction
    Pursuant to 40 CFR 63.345(b)(1), the Permittee may not construct a new tank subject to 40 CFR 63, Subpart N (including non-affected tanks defined in 40 CFR 63.344(e)) without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAQ. In addition, the Permittee may not change, modify, or reconstruct tanks 4270 and 4269 without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAQ.

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(A) The NCR shall contain the information identified in 40 CFR 63.345(b) (2) and (3).

- (B) A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device [i.e., the addition of duct work to the CMP system].
- (C) A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct tanks 4270 and 4269 serves as this notification.
- (D) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAQ before construction, modification, or reconstruction may commence.
- (b) Performance Test Results

The Permittee shall document results from any future performance tests in a complete test report that contains the information required in 40 CFR 63.344(a).

The Permittee shall submit reports of performance test results as part of the Notification of Compliance Status, described in 40 CFR 63.347(e), no later than forty-five (45) days following the completion of the performance test.

(c) Ongoing Compliance Status Report

The Permittee shall prepare summary reports to document the ongoing compliance status of tanks 4270 and 4269 using the Ongoing Compliance Status Report form provided with this permit. This report shall contain the information specified in 40 CFR 63.347(g)(3).

Because tanks 4270 and 4269 are located at site that is an area source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be retained on site and made available to IDEM, OAQ upon request.

- (1) The Ongoing Compliance Status Report shall be completed according to the following schedule except as provided in paragraphs (c)(2).
  - (A) The first report shall cover the period from the start-up date of the emissions units to December 31 of the year in which the emissions units begin operation.
  - (B) Following the first year of reporting, the report shall be completed on a calendar year basis with the reporting period covering from January 1 to December 31.
- (2) If either of the following conditions are met, semiannual reports shall be prepared and submitted to IDEM, OAQ:
  - (A) The total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c)) is one percent (1%) or greater of the total operating time as defined in Condition D.1.8(b) for the reporting period; or

(B) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is five percent (5%) or greater of the total operating time as defined in Condition D.1.8(b).

Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted semiannually until a request to reduce reporting frequency in accordance with 40 CFR 63.347(g)(2) is approved.

(3) IDEM, OAQ may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.

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#### SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

#### **Emissions Unit Description:**

- (b) One (1) strip tank, using a caustic soda solution, exhausting to stack S2.
- (c) On site soil remediation for trichloroethylene.
- (d) Ten (10) natural gas fired heaters, capacity: 2.40 million British thermal units per hour, total.
- (e) Seven (7) natural gas fired heating/cooling units, capacity: 1.31 million British thermal units per hour, total.
- (f) Four (4) natural gas fired air makeup units, capacity: 14.7 million British thermal units per hour, total.
- (g) One (1) natural gas fired annealing oven, capacity: 1.2 million British thermal units per hour.
- (h) One (1) diesel dispensing facility, having a storage capacity of 300 gallons, and dispensing 384 gallons per year.
- (i) One (1) kerosene dispensing facility, having a storage capacity of 300 gallons, and dispensing 363 gallons per year.
- (j) Machining of production tooling, where an aqueous cutting coolant continuously floods the machining interface, coolant usage: 1.32 gallons per day.
- (k) Nine (9) small cold cleaner parts washers, using non-halogenated solvents, usage: 180 gallons of solvent per year, total.
- (I) One (1) silicone-bronze welding station, maximum weld usage: 0.75 pound per hour.
- (m) Two (2) small natural gas fired holding pots for holding molten metal, capacity: 500 pounds of metal (bismuth, tin and lead) per hour, each, and less than 0.4 million British thermal units per hour, total.
- (n) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.
- (o) Packaging and labeling using water based adhesives that are less than or equal to five percent (5%) by volume of VOCs excluding HAPs, maximum usage rate: 0.53 gallon per hour.
- (p) Thirteen (13) grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations, capacity: 8 pounds of steel per hour.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

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## Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

## D.2.1 Particulate Matter (PM) [326 IAC 6-3]

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the one (1) silicone-bronze welding station shall be limited to 0.551 pounds per hour when operating at a process weight rate of 0.75 pound per hour, which is less than 100 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rates from each of the thirteen (13) grinding and machining operations shall be 0.551 pounds per hour when operating at a process weight rate of less than 100 pounds per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour; and  $P =$  process weight rate in tons per hour

#### D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator of the nine (9) cold cleaner parts washers shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a matter that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

## Compliance Determination Requirements [326 IAC 2-1.1-11]

## D.2.3 Particulate Matter (PM)

The control equipment for PM control at the thirteen (13) grinding and machining operations shall be in operation at all times when the emission units exhausting to those control devices are in operation.

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#### SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

#### **Emissions Unit Description:**

- (q) One (1) natural gas fired steam generating boiler, identified as 2071, constructed in September 1986, capacity: 5.021 million British thermal units per hour.
- (r) One (1) natural gas fired steam generating boiler, identified as 3641, constructed in January 1995, capacity: 8.369 million British thermal units per hour.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

## Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

## D.3.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-4, the PM emissions from the one (1) boiler, identified as 2071, shall not exceed 0.6 pound per million British thermal units.
- (b) Pursuant to 326 IAC 6-2-4, the PM emissions from the one (1) boiler, identified as 3641, shall not exceed 0.56 pound per million British thermal units.

These limitations were computed using the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

- Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input
- Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used. For Q less than 10 million British thermal units per hour, Pt shall not exceed 0.6 pound per million British thermal units.

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## **MALFUNCTION REPORT**

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6

and to qualify for th	ne exemption under 326 IAC	1-6-4.
THIS FACILITY MEETS THE APPLICABILITY REQUIPMENTICULATE MATTER?, 25 TONS/YEAR SUIPMENT ON STEAM OF THE APPLICABILITY REQUIPMENT OR PROCESSION OF THE APPLIC	LFUR DIOXIDE ?, 25 TON OGEN SULFIDE ?, 25 TON OUNDS ?, 25 TONS/YEAR F SINGLE HAZARDOUS AIR POLLI , 1 TON/YEAR LEAD OR L LISTED UNDER 326 IAC 2-5.1	S/YEAR NITROGEN OXIDES ?, IS/YEAR TOTAL REDUCED SULFUR FLUORIDES ?, 100 TONS/YEAR UTANT ?, 25 TONS/YEAR ANY EAD COMPOUNDS MEASURED AS 1-3(2) ? EMISSIONS FROM
THIS MALFUNCTION RESULTED IN A VIOLATION OF PERMIT LIMIT OF	F: 326 IAC OR, PERMIT	CONDITION # AND/OR
THIS INCIDENT MEETS THE DEFINITION OF 'MALFU	JNCTION' AS LISTED ON REVER	RSE SIDE ? Y N
THIS MALFUNCTION IS OR WILL BE LONGER THAN	THE ONE (1) HOUR REPORTING	G REQUIREMENT? Y N
COMPANY:	PHONE NO. :	
LOCATION: (CITY AND COUNTY) PERMIT NO AFS PLANT ID: CONTROL/PROCESS DEVICE WHICH MALFUNCTIONI	AFS POINT ID: ED AND REASON:	INSP:
DATE/TIME MALFUNCTION STARTED:/		AM / PM
ESTIMATED HOURS OF OPERATION WITH MALFUNC	TION CONDITION:	
DATE/TIME CONTROL EQUIPMENT BACK-IN S	ERVICE// 20	AM / PM
TYPE OF POLLUTANTS EMITTED: TSP, PM-10	), SO2, VOC, OTHER:	
ESTIMATED AMOUNT OF POLLUTANT EMITTED	DURING MALFUNCTION:	
MEASURES TAKEN TO MINIMIZE EMISSIONS: _		
REASONS WHY FACILITY CANNOT BE SHUTDO	OWN DURING REPAIRS:	
CONTINUED OPERATION REQUIRED TO PROVIDE ESCONTINUED OPERATION NECESSARY TO PREVENT CONTINUED OPERATION NECESSARY TO PREVENT INTERIM CONTROL MEASURES: (IF APPLICABLE)	INJURY TO PERSONS:  SEVERE DAMAGE TO EQUIPME	
MALFUNCTION REPORTED BY:(SIGNA	TI'	TLE:
MALFUNCTION RECORDED BY:	DATE:	TIME:

\*SEE PAGE 2

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# Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

## 326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

## 326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

\* <u>Essential services</u> are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:		

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

## MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Elkhart Products Corpo	Elkhart Products Corporation	
Address:	1255 Oak Street		
City:	Elkhart		
Phone #:	(219) 264-3181		
MSOP #:	039-11709-00036		
hereby certify that Elkl	hart Products Corporation is	9 still in operation.	

I hereby certify that Elkhart Products Corporation is
I hereby certification is the product of the product is the produc

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:		

Permit Reviewer: CAO/MES

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

## MINOR SOURCE OPERATING PERMIT CHROMIUM ELECTROPLATING AND ANODIZING NESHAP ONGOING COMPLIANCE STATUS REPORT

(Complete this form for each affected tank)

Source Name: Elkhart Products Corporation

Source Address: 1255 Oak Street, Elkhart, Indiana 46514 Mailing Address: P.O. Box 1008, Elkhart, Indiana 46515

MSOP No.: 039-11709-00036

Tank ID #:

Type of process: Hard Chromium Electroplating

Monitoring Parameter: Parameter Value:

Limits: Total chromium concentration may not exceed 0.015 mg/dscm

This form is to be used to report compliance for the Chromium Electroplating and Anodizing NESHAP only. The frequency for completing this report may be altered by IDEM, OAQ, Compliance Branch.

Companies classified as a major source: submit this report no later than 30 days after the end of the reporting period.

Companies classified as an area source: complete this report no later than 30 days after the end of the reporting period, and retain on site unless otherwise notified.

#### This form consists of 2 pages

Page 1 of 2

BEGINNING AND ENDING DATES OF THE REPORTING PERIOD:

TOTAL OPERATING TIME OF THE TANK DURING THE REPORTING PERIOD:

#### MAJOR AND AREA SOURCES: CHECK ONE

- 9 NO DEVIATIONS OF THE MONITORING PARAMETER ASSOCIATED WITH THIS TANK FROM THE COMPLIANT VALUE OR RANGE OF VALUES OCCURRED DURING THIS REPORTING PERIOD.
- THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES DURING THIS REPORTING PERIOD (THUS INDICATING THE EMISSION LIMITATION MAY HAVE BEEN EXCEEDED, WHICH COULD RESULT IN MORE FREQUENT REPORTING).

#### AREA (I.E., NON-MAJOR) SOURCES OF HAP ONLY:

IF DEVIATIONS OCCURRED, LIST THE AMOUNT OF TANK OPERATING TIME EACH MONTH THAT MONITORING RECORDS SHOW THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES.

JAN	APR	JUL	OCT
FEB	MAY	AUG	NOV
MAR	JUN	SEP	DEC

## HARD CHROME TANKS / MAXIMUM RECTIFIER CAPACITY LIMITED IN ACCORDANCE WITH 40 CFR 63.342(c)(2) ONLY: LIST THE ACTUAL AMPERE-HOURS CONSUMED (BASED ON AN AMP-HR METER) BY THE INDIVIDUAL TANK.

JAN	APR	JUL	OCT
FEB	MAY	AUG	NOV
MAR	JUN	SEP	DEC

Elkhart Products Corporation Elkhart, Indiana Permit Reviewer: CAO/MES Page 30 of 30 MSOP 039-11709-00036

## CHROMIUM ELECTROPLATING AND ANODIZING NESHAP ONGOING COMPLIANCE STATUS REPORT

ATTACH A SEPARATE PAGE IF NEEDED	Page 2 of 2
IF THE OPERATION AND MAINTENANCE PLAN REQUIRED BY 40 CFR 63.342 (f)(EXPLANATION OF THE REASONS FOR NOT FOLLOWING THE PLAN AND DESCRIPTION OF THE REASONS FOR NOT FOLLOWING THE PLAN AND DESCRIPTION OF THE REASONS FOR NOT FOLLOWING THE PLAN AND DESCRIPTION OF THE REASONS FOR NOT FOLLOWING THE PLAN AND DESCRIPTION OF THE REASONS FOR NOT FOLLOWING THE PLAN AND DESCRIPTION OF THE PLAN AND DESCRIPT	
DESCRIBE ANY CHANGES IN TANKS, RECTIFIERS, CONTROL DEVICES, MONIT REPORT:	ORING, ETC. SINCE THE LAST STATUS
ADDITIONAL COMMENTS:	
ALL SOURCES: CHECK ONE	
<b>9</b> I CERTIFY THAT THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE OPERATION AND MAINTENANCE PLAN ON FILE; AND, THAT THE INFORMATION AND TRUE TO THE BEST OF MY KNOWLEDGE.	
9 THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE NOT FOLLOWED MAINTENANCE PLAN ON FILE, AS EXPLAINED ABOVE AND/OR ON ATTACHED.	IN ACCORDANCE WITH THE OPERATION AND
Submitted by:	
Title/Position:	
Signature:	
Date:	
Phone:	
Attach a signed certification to complete	e this report.

# Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for Operation

Source Name: Elkhart Products Corporation

Source Location: 1255 Oak Street, Elkhart, Indiana 46514

County: Elkhart

Construction Permit No.: MSOP 039-11709-00036

SIC Code: 3498

Permit Reviewer: CarrieAnn Ortolani

On January 22, 2001, the Office of Air Quality (OAQ) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that Elkhart Products Corporation had applied for a construction permit to construct and operate a hard chromium electroplating source with composite mesh pad scrubbers as controls. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On February 16, 2001, James M. Hanlon, Sr., of EIS Environmental Engineers, on behalf of Elkhart Products Corporation, submitted comments on the proposed operating permit. The summary of the comments and corresponding responses are as follows (The permit language, if changed, has deleted language as strikeouts and new language bolded.):

## Comment 1:

Section D.1.8(b) describes the definition of operating time for the plating units. This definition will be difficult to track because it does not correspond with the manner in which these tanks are used. The definition of operating time, as proposed, is the time when parts are in the tanks and any idle periods between such occurrences that are less than fifteen minutes in length. The actual use of these tanks is on an intermittent basis to plate tooling only. No production is done on these tanks. The tanks are kept on, that is, ready to plate with the plating solution ready and the control device operating during all normal operating shifts. The tanks are only off overnight and on weekends and holidays. Since the tanks are used on an as needed basis by several craftsmen, there is no continuity to determine the length of the idle periods between uses. Elkhart Products requests that one of the following be substituted for the present uses. Elkhart Products requests that one of the following be substituted for the present uses. Elkhart Products requests that one of the following be substituted for the present uses. Elkhart Products requests that one of the following be substituted for the present uses. Elkhart Products requests are listed in order of preference.

- (a) Eliminate the usage time record and rely only on the amp-hour readings already required.
- (b) Substitute an "on" time record for the usage time record.
- (c) Eliminate the fifteen-minute idle period from the definition of usage time.

## Response 1:

Since emissions will occur when the rectifiers are on and there is a part in the tank, IDEM, OAQ defines that time as operating time. The fifteen-minute idle period simplifies monitoring and recording of operating time because the Permittee is not required to record each minute when a part is not in the tank unless there are no parts in the tank for fifteen (15) minutes or more. Amp meters

Elkhart Products Corporation Elkhart, Indiana Permit Reviewer: CAO/MES

can be used to record operating time as long as they monitor the amount of time when the rectifiers are on and there is a part in the tank. Pursuant to 326 IAC 2-6.1-5(a)(2), IDEM, OAQ has the authority to require monitoring, testing, reporting, and record keeping that assures reasonable information is provided to evaluate compliance consistent with the permit terms and conditions, the underlying requirements of 326 IAC 2, and the Clean Air Act. Condition D.1.8 has been revised to indicate that when the time between placing parts in the tank is less than fifteen (15) minutes, that time may be considered operating time, but does not have to be considered operating time.

## D.1.8 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-6.1-5(a)(2)][40 CFR 63.343(c)][326 IAC 20-8-1]

- (a) Pursuant to 40 CFR 63.343(c)(1)(ii), when using a composite mesh-pad system to comply with the limits specified in Condition D.1.3, the Permittee shall monitor and record the pressure drop across the composite mesh-pad system during tank operation once each day that the hard chromium electroplating tank is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ±1 inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant values for pressure drop established during multiple performance tests.
- (b) Tank operation or operating time is defined as that time when a part is in the tank and the rectifier is turned on. If the amount of time that no part is in the tank is fifteen minutes or longer, that time is not considered operating time. Likewise, if the amount of time between placing parts in the tank (i.e., when no part is in the tank) is less than fifteen minutes, that time between plating the two parts is may be considered operating time.

#### Comment 2:

There are two typographical errors in the text.

- (a) The reference at D.1.9(j) should be to D.1.8(b), not D.1.9(b).
- (b) The quotation of 326 IAC 8-3-2 can be corrected at D.2.2 by substituting "facility" for "emissions unit."

## Response 2:

(a) Condition D.1.9(j) is revised as follows:

The total process operating time, as defined in Condition **D.1.8(b)** <del>D.1.9(b)</del>, of each tank, during the reporting period.

(b) Condition D.2.2(b) is revised as follows:

Equip the cleaner with a emissions unit facility for draining cleaned parts;

Upon further review, the OAQ has decided to make the following changes to the construction permit: The permit language is changed to read as follows (deleted language appears as strikeouts, new language is **bolded**):

The name of IDEM's "Office of Air Management" was changed to "Office of Air Quality" on January 1, 2001. All references to "Office of Air Management" in the permit have been changed to "Office of Air Quality" and all references to "OAM" have been changed to "OAQ."

## Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Minor Source Operating Permit

## **Source Background and Description**

Source Name: Elkhart Products Corporation

Source Location: 1255 Oak Street, Elkhart, Indiana 46514

County: Elkhart SIC Code: 3498

Operation Permit No.: MSOP 039-11709-00036
Permit Reviewer: CarrieAnn Ortolani

The Office of Air Management (OAM) has reviewed an application from Elkhart Products Corporation relating to the operation of a hard chromium electroplating source.

## **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices, and emission units and pollution control devices that did not require an approval:

- (a) Two (2) hard chrome electroplating tanks, identified as Tanks 4270 and 4269, constructed in 1998, using a hexavalent chromium bath and having rectifier capacities of 500 amps, each, and a maximum cumulative rectifier capacities of 2,940,000 amp-hours, each, equipped with a composite mesh pad scrubber as control, and exhausting to stack S1.
- (b) One (1) strip tank, using a caustic soda solution, exhausting to stack S2.
- (c) On site soil remediation for trichloroethylene.
- (d) Ten (10) natural gas fired heaters, capacity: 2.40 million British thermal units per hour, total.
- (e) Seven (7) natural gas fired heating/cooling units, capacity: 1.31 million British thermal units per hour, total.
- (f) Four (4) natural gas fired air makeup units, capacity: 14.7 million British thermal units per hour, total.
- (g) One (1) natural gas fired annealing oven, capacity: 1.2 million British thermal units per hour.
- (h) One (1) diesel dispensing facility, having a storage capacity of 300 gallons, and dispensing 384 gallons per year.
- (i) One (1) kerosene dispensing facility, having a storage capacity of 300 gallons, and dispensing 363 gallons per year.

- (j) Machining of production tooling, where an aqueous cutting coolant continuously floods the machining interface, coolant usage: 1.32 gallons per day.
- (k) Nine (9) small cold cleaner parts washers, using non-halogenated solvents, usage: 180 gallons of solvent per year, total.
- (I) One (1) silicone-bronze welding station, maximum weld usage: 0.75 pound per hour.
- (m) Two (2) small natural gas fired holding pots for holding molten metal, capacity: 500 pounds of metal (bismuth, tin and lead) per hour, each, and less than 0.4 million British thermal units per hour, total.
- (n) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.
- (o) Packaging and labeling using water based adhesives that are less than or equal to five percent (5%) by volume of VOCs excluding HAPs, maximum usage rate: 0.53 gallon per hour.
- (p) Thirteen (13) grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations, capacity: 8 pounds of steel per hour.
- (q) One (1) natural gas fired steam generating boiler, identified as 2071, constructed in September 1986, capacity: 5.021 million British thermal units per hour.
- (r) One (1) natural gas fired steam generating boiler, identified as 3641, constructed in January 1995, capacity: 8.369 million British thermal units per hour.

## **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities, which previously required an approval, operating at this source during this review process.

#### **New Emission Units and Pollution Control Equipment**

There are no new facilities proposed at this source during this review process.

## **Existing Approvals**

The source has no previous approvals.

## **Stack Summary**

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
S1	Chrome Plating	18.5	0.75	1,576	68

#### **Enforcement Issue**

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on December 27, 1999, with additional information received on February 22, November 27, and December 5, 2000.

#### **Emission Calculations**

Chromium emissions (Single HAP) from the biggest chromium electroplating source in Indiana are less than ten (10) tons per year and Elkhart Products Corporation is a much smaller source in comparison. Therefore, no emission calculations were necessary for the chromium electroplating because the chromium emissions from this source will be less than ten (10) tons per year. See Appendix A (pages 1 through 7) of this document for detailed emissions calculations for all other processes.

#### **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	19.6
PM <sub>10</sub>	20.4
SO <sub>2</sub>	0.088
VOC	4.48
СО	12.3
NO <sub>X</sub>	14.6

HAPs	Potential To Emit (tons/year)
Chromium	< 10
Benzene	3.07E-4

HAPs	Potential To Emit (tons/year)
Dichlorobenzene	1.75E-4
Formaldehyde	1.10E-2
Hexane	2.64E-1
Toluene	4.97E-4
Lead	7.67E-5
Cadmium	1.61E-4
Manganese	3.27E-4
Nickel	3.07E-4
Trichloroethylene	1.18E-1
TOTAL	< 25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of each pollutant is less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPS is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (c) The existing source is subject to 326 IAC 20-8 but not subject to 326 IAC 2-5.5-1(b)(2), Registration, because the source is not a decorative coating plant. The source is a hard chromium electroplating source and the source emits less than major source levels (see (a) and (b) above). Therefore, the source is subject to the provisions of 326 IAC 2-6.1-3(a).

#### **Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the 1990 OAM emission data.

Pollutant	Actual Emissions (tons/year)
PM	0.00
PM <sub>10</sub>	0.00
SO <sub>2</sub>	not reported
VOC	0.00
СО	not reported
NO <sub>X</sub>	not reported
HAP	not reported

# **Limited Potential to Emit**

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)							
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	voc	СО	NO <sub>x</sub>	HAPS	
Two (2) hard chrome electroplating tanks	0.00	0.00	0.00	0.00	0.00	0.00	< 10	
One (1) strip tank, on site soil remediation, ten (1) heaters, seven (7) heating/cooling units, four (4) air makeup units, one (1) annealing oven, one (1) diesel dispensing facility, one (1) kerosene dispensing facility, machining of production tooling, nine (9) small cold cleaner parts washers, one (1) silicone bronze welding station, two (2) small natural gas fired holding pots, treatment of waste water streams, packaging and labeling, and thirteen (13) grinding and machining operations	19.5	20.0	0.053	4.16	7.36	8.76	0.284	
Two (2) natural gas fired steam generating boilers	0.112	0.446	0.035	0.323	4.93	5.87	0.112	
Total Emissions	19.6	20.4	0.088	4.48	12.3	14.6	< 25	

# **County Attainment Status**

The source is located in Elkhart County.

Pollutant	Status
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	maintenance
СО	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>X</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance attainment for ozone. Therefore, VOC and NO<sub>X</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Elkhart County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### **Source Status**

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	19.6
PM <sub>10</sub>	20.4
SO <sub>2</sub>	0.088
VOC	4.48
СО	12.3
NO <sub>x</sub>	14.6
Single HAP	< 10
Combination HAPS	< 25

- (a) This source, which has no previous approvals, is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.
- (b) Fugitive Emissions
  Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2,
  40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance
  Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and
  volatile organic compound (VOC) emissions are not counted toward determination of PSD
  and Emission Offset applicability.

# **Part 70 Permit Determination**

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than one hundred (100) tons per year,

- (b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and
- (c) any combination of HAPS is less than twenty-five (25) tons per year.

This is the first air approval issued to this source.

# **Federal Rule Applicability**

- (a) The two (2) natural gas fired steam generating boilers, identified as 2071 and 3641, rated at 5.021 million British thermal units per hour and 8.369 million British thermal units per hour, respectively, are not subject to the New Source Performance Standards, 326 IAC 12, 40 CFR 60.40, 40 CFR 60.40a, 40 CFR 60.40b and 40 CFR 60.40c, Subparts D, Da, Db and Dc because they each have a capacity less than 10 million British thermal units per hour.
- (b) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (c) The nine (9) small cold cleaner parts washers are not subject to the requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP) for halogenated solvent cleaning, 40 CFR Part 60, Subpart T, because the cold cleaners do not use any halogenated solvents.
- (d) Tanks 4270 and 4269 are subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 63, Subpart N, and 326 IAC 20-1-1). Pursuant to 40 CFR 63, Subpart N, and 326 IAC 20-1-1, the chromium electroplating operations are subject to the following conditions:
  - (1) Emission limitation:

The Permittee shall comply with the requirements of this condition on and after the compliance date for the tanks.

The hard chromium electroplating tanks, identified as 4270 and 4269, are considered small, new hard chromium electroplating operations. During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from the tanks by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed fifteen-thousandth milligrams of total chromium per dry standard cubic meter of ventilation air (0.015 mg/dscm) [equivalent to six and six-tenths times ten raised to the power of negative six grains of total chromium per dry standard cubic foot of ventilation air (6.6x10<sup>-6</sup> gr/dscf)].

(2) Monitoring Requirements:

Pursuant to 40 CFR 63.343(c)(1)(ii), when using a composite mesh-pad system to comply with the limits specified above, the Permittee shall monitor and record the pressure drop across the composite mesh-pad system during tank operation once each day that the hard chromium electroplating tank is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ±1 inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant values for pressure drop established during multiple performance tests. Tank operation or operating time is defined as that time when a part is in the tank and the rectifier is turned on. If the amount of time that no part is in the tank is fifteen minutes or longer, that time is not considered operating time. Likewise, if the amount of time between placing parts in the tank (i.e., when no part is in the tank) is less than fifteen minutes, that time

between plating the two parts is considered operating time.

(3) Reporting Requirements:

A summary report shall be prepared to document the ongoing compliance status of the chromium electroplating operation. Because tanks 4270 and 4269 are located at site that is an area source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be retained on site and made available to IDEM, OAM upon request. If there are significant exceedance of chromium air emission limits (as defined in 40 CFR Part 63.347(h)(2)), then semiannual reports shall be submitted to:

Indiana Department of Environmental Management Air Compliance Branch, Office of Air Management Chromium Electroplating 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206

(e) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart N.

# State Rule Applicability - Entire Source

326 IAC 2-4.1-1 (New Source Toxics Control)

This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments. Therefore, the requirements of 326 IAC 2-4.1-1, New Source Toxics Control, are not applicable.

# 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of  $NO_X$  in Elkhart County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

# 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

# State Rule Applicability - Individual Facilities

326 IAC 6-2-4 (Particulate Emissions Limitations for Sources of Indirect Heating)

The two (2) boilers, identified as 2071 and 3641, both constructed after September 21, 1983, must comply with the requirements of 326 IAC 6-2-4. The emission limitations are based on the following equation, given in 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

where:

- Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input
- Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.
- (a) One (1) boiler, 2071, constructed in 1986

The heat input capacities of the boiler is 5.021 million British thermal units per hour.

 $Pt = 1.09/(5.021)^{0.26} = 0.72 \text{ lb/MMBtu heat input}$ 

Pursuant to 326 IAC 6-2-4(a), for Q less than 10 million British thermal units per hour, Pt shall not exceed 0.6 pound per million British thermal units. Therefore, the PM limitation for this boiler is 0.6 pound per million British thermal units.

Based on Appendix A, the potential PM emission rate is:

 $0.042 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.010 \text{ lb/hr}$ (0.010 lb/hr / 5.021 MMBtu/hr) = 0.002 lb PM per MMBtu

Therefore, the one (1) boiler, 2071, constructed in 1986, will comply with this rule.

### (b) One (1) boiler, 3641, constructed in 1995

The heat input capacity of the boiler is 8.369 million British thermal units per hour. The total heat input capacity of the indirect heating units at this source prior to the construction of this boiler was 5.021 million British thermal units per hour.

 $Pt = 1.09/(13.39)^{0.26} = 0.56 \text{ lb/MMBtu heat input}$ 

Based on Appendix A, the potential PM emission rate is:

 $0.070 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.016 \text{ lb/hr}$ (0.016 lb/hr / 8.369 MMBtu/hr) = 0.002 lb PM per MMBtu

Therefore, the one (1) boiler, 3641, constructed in 1995, will comply with this rule.

# 326 IAC 6-3-2 (Process Operations)

- (a) Pursuant to 326 IAC 6-3-2, Process Operations, the particulate matter (PM) emissions from the one (1) silicone-bronze welding station shall be limited to 0.551 pounds per hour when operating at a process weight rate of 0.75 pound per hour, which is less than 100 pounds per hour. Since the potential to emit PM from the one (1) silicone-bronze welding station is 0.004 pound per hour, the one (1) silicone-bronze welding station will comply with this rule.
- (b) Pursuant to 326 IAC 6-3-2, Process Operations, the particulate matter (PM) emissions from each of the thirteen (13) grinding and machining operations shall be limited to 0.551 pounds per hour when operating at a process weight rate of 8 pounds per hour, which is less than 100 pounds per hour. There are no emission factors which accurately represent these grinding and machining processes. Since there is minimal PM emissions from grinding and machining 8 pounds of metal parts per hour, the potential to emit PM was assumed to be no more than the allowable emissions pursuant to 326 IAC 6-3-2, Process Operations. In order to ensure compliance, the Permittee will be required to operate the control devices at all times when the processes exhausting to those control devices are in operation.

The particulate matter (PM) limitations were based on the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

```
E = 4.10 P^{0.67} where E = rate of emission in pounds per hour and P = process weight rate in tons per hour
```

326 IAC 8-3-2 (Organic Solvent Degreasing Operations)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator of the nine (9) cold cleaner parts washers shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a emissions unit for draining cleaned parts:
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a matter that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

### Conclusion

The operation of this hard chromium electroplating source shall be subject to the conditions of the attached proposed Minor Source Operating Permit 039-11709-00036.

# Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

# Heaters, Heat/Cool Units, Air Make-up Units, Annealing Oven and Holding Pots

Company Name: Elkhart Products Corporation

Address City IN Zip: 1255 Oak Street, Elkhart, Indiana 46514

MSOP: 039-11709 Plt ID: 039-00036

Reviewer: CarrieAnn Ortolani
Date: December 27, 1999

Heat Input Capacity Potential Throughput

MMBtu/hr MMCF/yr

20.0 175.29

### Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.167	0.666	0.053	8.76	0.482	7.36

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

# Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 4 for HAPs emissions calculations.

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Company Name: Elkhart Products Corporation

Address City IN Zip: 1255 Oak Street, Elkhart, Indiana 46514

MSOP: 039-11709 Plt ID: 039-00036

Reviewer: CarrieAnn Ortolani Date: December 27, 1999

PROCESS	Number of Stations	Max. electrode consumption per station		EMISSION FACTORS * (lb pollutant / lb electrode)				EMISSIONS (lb/hr)				TOTAL HAPS (lb/hr)
WELDING		(lbs/hr)		PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Submerged Arc Metal Inert Gas (MIG)(ER5154) Stick (E7018 electrode) Tungsten Inert Gas (TIG)(carbon steel) Oxyacetylene(carbon steel)	0 0 0 1	0 0 0 0.75 0		0.036 0.0241 0.0211 0.0055 0.0055	0.00003		0.00001	0.000 0.000 0.000 0.000 0.004 0.000	0 0 0 0	0.000 0.000 0.000 0.000 0.000	0 0 0	0.000 0.000 0.000 0.000 0.000
	Number of Stations	Max. Metal Thickness Cut	Max. Metal Cutting Rate	EMISSION FA	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)			EMISSIONS (lbs/hr)				TOTAL HAPS (lb/hr)
FLAME CUTTING		(in.)	(in./minute)	PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene Oxymethane Plasma	0 0 0	0 0 0	0 0 0	0.1622 0.0815	0.0005 0.0002	0.0001	0.0003 0.0002	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000
EMISSION TOTALS								PM = PM10	Mn	Ni	Cr	Total HAPs
Potential Emissions lbs/hr								0.004	0.00	0.00	0.00	0.00
Potential Emissions lbs/day								0.099	0.00	0.00	0.00	0.00
Potential Emissions tons/year								0.018	0.00	0.00	0.00	0.00

Hazardous Air Pollutant	Weight	PTE
	%	(tons/yr)
Lead	0.02%	3.61E-06
Manganese	1.50%	2.71E-04

### METHODOLOGY

\*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column. Consult AP-42 or other reference for different electrode types.

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Plasma cutting emission factors are from the American Welding Society study published in Sweden (March 1994).

Welding and other flame cutting emission factors are from an internal training session document.

See AP-42, Chapter 12.19 for additional emission factors for welding.

PTE of Each HAP = PTE of PM x weight % HAP

# Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

# Heaters, Heat/Cool Units, Air Make-up Units, Annealing Oven and Holding Pots HAPs Emissions

Company Name: Elkhart Products Corporation

Address City IN Zip: 1255 Oak Street, Elkhart, Indiana 46514

MSOP: 039-11709 Plt ID: 039-00036

Reviewer: CarrieAnn Ortolani Date: December 27, 1999

### HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.84E-04	1.05E-04	6.57E-03	1.58E-01	2.98E-04

### HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	4.38E-05	9.64E-05	1.23E-04	3.33E-05	1.84E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

### Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Two (2) Boilers

Company Name: Elkhart Products Corporation

Address City IN Zip: 1255 Oak Street, Elkhart, Indiana 46514

MSOP: 039-11709 Plt ID: 039-00036

Reviewer: CarrieAnn Ortolani Date: December 27, 1999

2071

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr

5.02 43.98

#### Pollutant

		. onatan				
	PM*	PM10*	SO2	NOx	VOC	СО
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.042	0.167	0.013	2.20	0.121	1.85

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

### 3641

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr

8.37 73.31

#### Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.070	0.279	0.022	3.67	0.202	3.08

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 4 for HAPs emissions calculations.

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

### Page 4 of 7 TSD App A

### Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Two (2) Boilers HAPs Emissions

Company Name: Elkhart Products Corporation

Address City IN Zip: 1255 Oak Street, Elkhart, Indiana 46514

MSOP: 039-11709 Plt ID: 039-00036

Reviewer: CarrieAnn Ortolani Date: December 27, 1999

### HAPs - Organics

		1 11 11 0 0 1 9 4 1 1 1 0 0			
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.23E-04	7.04E-05	4.40E-03	1.06E-01	1.99E-04

### HAPs - Metals

Emission Factor in lb/MMcf	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.93E-05	6.45E-05	8.21E-05	2.23E-05	1.23E-04

Methodology is the same as page 3.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

# Appendix A: Emissions Calculations Miscellaneous Material Usage

Company Name: Elkhart Products Corporation

Address City IN Zip: 1255 Oak Street, Elkhart, Indiana 46514

MSOP: 039-11709 Plt ID: 039-00036

Reviewer: CarrieAnn Ortolani Date: December 27, 1999

Material	Usage	Density	Weight %	Weight %	Transfer	VOC	HAP	PM & PM-10
	(gal/yr)	(lbs/gal)	VOC	HAP	Efficiency	<b>Emissions</b>	Emissions	Emissions
			excluding water		%	(tons/yr)	(tons/yr)	(tons/yr)
Grinding and Machining			_					
TRIM CLEAR	110	9.17	60.00%	0.00%	100.00%	0.303	0.000	0.00
Severely hydrotreated naphthenic oil	880	8.28	0.00%	0.00%	100.00%	0.000	0.000	0.00
Houghto-draw 756-A	12000	9.17	0.00%	0.00%	100.00%	0.000	0.000	0.00
CLAIRO OIL 160	5200	7.67	0.00%	0.00%	100.00%	0.000	0.000	0.00
TRIM E 206	55	8.26	30.00%	0.00%	100.00%	0.068	0.000	0.00
CITGO Cutting Oils	220	7.76	1.00%	0.00%	100.00%	0.009	0.000	0.00
Adhesive								
GF-5TT	4642.8	9.41	0.00%	0.00%	100.00%	0.000	0.000	0.00
Aqueous cutting coolant								
CANMIST concentrate HD	600	7.71	0.00%	0.00%	100.00%	0.000	0.000	0.00
Nine (9) parts washers								
Solvent 140-66	180	6.59	100.00%	0.00%	100.00%	0.593	0.000	0.00
Dispensing								
Diesel	384	7.05	100.00%	0.00%	100.00%	1.35	0.000	0.00
Kerosene	363	6.8	100.00%	0.00%	100.00%	1.23	0.000	0.00
					Totals:	3.56	0.00	0.00

Emissions based on Tanks 4.0	VOC (lbs/yr)	VOC (tons/yr)
Diesel	0.04	0.00002
Kerosene	0.05	0.00003
	Total:	0.00005

	VOC	VOC	HAP	HAP
Stripping Tower Emissions	(lbs/yr)	(tons/yr)	(lbs/yr)	(tons/yr)
Trichloroethylene	235.6	0.118	235.6	0.118

# Methodology

Potential VOC Tons per Year = Density of material (lbs/gal) \* Gallons of Material used (gal/yr) \* Weight % VOC excluding water \* (1 ton/2000 lbs)

Potential PM Tons per Year = Density of material (lbs/gal) \* Gallons of Material used (gal/yr) \* (1 - Weight % VOC) \* Transfer Efficiency \* (1 ton/2000 lbs)

Potential HAPs Tons per Year = Density of material (lbs/gal) \* Gallons of Material used (gal/yr) \* Weight % HAPs \* (1 ton/2000 lbs)

# Appendix A: Emission Calculations Grinding and Machining

Company Name: Elkhart Products Corporation

Address City IN Zip: 1255 Oak Street, Elkhart, Indiana 46514

MSOP: 039-11709 Plt ID: 039-00036

Reviewer: CarrieAnn Ortolani Date: December 27, 1999

Unit ID	Process Weight Rate	326 IAC 6-3-2 Allowable	Maximum Allowable PM
		PM Emissions	Emission Rate
	(lbs of steel/hr)	(lbs/hr)	(tons/yr)
M1005 Tool room lathes	8.0	0.551	2.41
M1006 Tool room grinders	8.0	0.551	2.41
746 Tool room buffer and grinders	8.0	0.551	2.41
1741 Copper sizing and facing	8.0	0.551	2.41
1742 Copper Sawing	8.0	0.551	2.41
2745 Copper sizing and facing	8.0	0.551	2.41
1464 Copper sizing and facing	8.0	0.551	2.41
722 Tool Grinders	8.0	0.551	2.41
			19.3

# Methodology

Allowable Emissions = 4.10(Process Weight Rate)^0.67

A process weight rate of 100 is used to calculate the allowable emission rate for all facilities with process weight rates less than 100.